whole system, cannot possibly be explained in terms of these material continuities and the interplay of neurone upon neurone, and of system upon system, rendered possible by them. It is not that these physical connexions and interactions between neurones are not real and important ; they are very real, and they play a role of great importance; but they do not in themselves suffice.

Over and above all this system of material connexions, the whole system is pervaded by another and very different system of relations—relations of dominance and subordination, relations analogous to those moral relations obtaining between the members of an army of varied rank in the hierarchical system. Without this second system of relations, the other system, consisting of merely physical connexions, would provide but a very lowly kind of unity and but very imperfect co-ordination and integration of the whole system; if, indeed, any appreciable degree of integration could be achieved.

The most obvious manifestation of the operation of this second system of relations occurs whenever we concentrate our energies in an effort towards some particular goal, in what we call an effort of volition or of attention. In all such instances we notice how all other activities are subordinated to this one dominant activity of the moment; all of them that might in any degree interfere are checked, partially or wholly inhibited; and this is true, not only of other volitional and consciously directed activities, but also of such highly

automatized
activities as walking, and even of such deeply planted
fundamental vital activities as the movements of respira-
tion—at the moment of supreme mental effort even the
respiratory movements cease and sometimes also even